### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Hee-young Seo, et al.

Filing Date:

Herewith

Title:

SIMULTANEOUS BI-DIRECTIONAL BUFFER INCLUDING SELF-TEST CIRCUIT HAVING FUNCTION OF GENERATING INPUT SIGNAL AND SELF

TESTING METHOD OF THE SIMULTANEOUS BI-DIRECTIONAL BUFFER

## CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.10

"Express Mail" Mailing Label Number EV322656600US I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated below and is addressed to Mail Stop Patent Application, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Mail Stop Patent Application

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

#### TRANSMITTAL LETTER

Sir:

Enclosed herewith for filing in the above-identified patent application please find the following listed items:

- 1. New Application Transmittal;
- 2. New Patent Application;
- Executed Declaration, Petition and Power of Attorney;
- 4. Five (5) Sheets of Formal Drawings (Figures 1-8);
- Certified Copy of Priority Document Korean Application No. 02-77033; 5.
- 6. Information Disclosure Statement;
- 7. PTO-1449 form and copy of cited reference AA;
- 8.4 Check in the amount of \$770.00 to cover application filing fee;
- 9. Assignment Recordation Form Cover Sheet - - PTO-1595;
- 10. Executed Assignment;
- 11. Check in the amount of \$40.00 to cover Assignment recordation fee; and
- Return Postcard. 12.

In connection with the foregoing matter, please charge any additional fees which may be due, or credit any overpayment, to Deposit Account Number 50-1798. A duplicate copy of this letter is provided for this purpose.

Respectfully submitted,

Mills & Onello LLP

Eleven Beacon Street, Suite 605

Boston, MA 02108

Telephone: (617) 994-4900 Facsimile: (617) 742-7774

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Steven M. Mills

Registration Number 36,610 Attorney for Applicants



#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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r(s):	Hee-young Seo and Jung-hwa	n Choi	•		
e):	BUFFER INCLUDING SELI CIRCUIT HAVING FUNCT GENERATING INPUT SIGN SELF TESTING METHOD	F-TEST ION OF NAL AND OF THE	"Express Mail" Mailin I hereby certify that this United States Postal Ser Addressee" service unde and is addressed to Mail Patents, P.O. Box 1450,	37 C.F.R. § 1.10 g Label Number EV322656600 paper or fee is being deposited vice "Express Mail Post Office or 37 CFR 1.10 on the date indic Stop Patent Application, Comr	with the to cated above missioner for
Type of a(n)	f Application This new application	ation is for	Date:   (Spin.)	Amy Eucen Amy Eucen Print Name	leh
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□ <sub>Div</sub>	isional.				
□ Con	tinuation.				-
□ Con	tinuation-in-part (C-I-P).		·		٠.
nefit of	Prior Application(s)				
		tted claims th	e benefit of prior Kore	an application nos. <u>02-77</u>	033.
Papers E	nclosed				
16	_ Pages of specification				
3	_Pages of claims				
1 .	Page of Abstract				•
5	Sheets of drawings  formal informal			•	
	Type of a(n)  Type of a(n)  Orige  Desi  Con Con nefit of 1  A The See Ite  16  3  1  5	e): SIMULTANEOUS BI-DIRECT BUFFER INCLUDING SELF CIRCUIT HAVING FUNCT GENERATING INPUT SIGN SELF TESTING METHOD OF SIMULTANEOUS BI-DIRECT BUFFER  Type of Application This new application  Original (nonprovisional)  Design  Plant  Divisional.  Continuation.  Continuation-in-part (C-I-P).  Inefit of Prior Application being transmit See Item 7.  Papers Enclosed  16 Pages of specification  3 Pages of claims  1 Page of Abstract  5 Sheets of drawings  I formal	Exercises: Hee-young Seo and Jung-hwan Choi  Exercises: SIMULTANEOUS BI-DIRECTIONAL BUFFER INCLUDING SELF-TEST CIRCUIT HAVING FUNCTION OF GENERATING INPUT SIGNAL AND SELF TESTING METHOD OF THE SIMULTANEOUS BI-DIRECTIONAL BUFFER  Type of Application This new application is for a(n)  Original (nonprovisional)  Design Plant Divisional. Continuation. Continuation. Continuation being transmitted claims the See Item 7.  Papers Enclosed  16 Pages of specification 3 Pages of claims 1 Page of Abstract 5 Sheets of drawings See Item 1 informal Informal	SIMULTANEOUS BI-DIRECTIONAL BUFFER INCLUDING SELF-TEST CIRCUIT HAVING FUNCTION OF GENERATING INPUT SIGNAL AND SELF TESTING METHOD OF THE SIMULTANEOUS BI-DIRECTIONAL BUFFER    Type of Application This new application is for a(n)   Type of Application This new application is for a(n)   Design Plant Divisional.   Continuation.   Continuation.   Continuation being transmitted claims the benefit of prior Kore See Item 7.	(s): Hee-young Seo and Jung-hwan Choi e): SIMULTANEOUS BI-DIRECTIONAL BUFFER INCLUDING SELF-TEST CIRCUIT HAVING FUNCTION OF GENERATING INPUT SIGNAL AND SELF TESTING METHOD OF THE SIMULTANEOUS BI-DIRECTIONAL BUFFER  Type of Application This new application is for a(n)  Original (nonprovisional)  Design Plant Divisional. Continuation. Continuation. Continuation being transmitted claims the benefit of prior Korean application nos. 02-77  Papers Enclosed  16 Pages of specification 3 Page of Abstract 5 Sheets of drawings formal informal

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		Preliminary	Amendment
	. 🛛	Information	Disclosure Statement (37 C.F.R. 1.98)
	$\boxtimes$	Form PTO-1	449 (PTO/SB/08A and 08B)
	$\boxtimes$	Copies of cit	ed references
		Declaration of	of Biological Deposit
			of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for y invention containing nucleoticle and/or amino acid sequence.
		•	on of Attorney(s) to Accept and Follow Instructions from Representative
	<u> </u>	Special Con	uments
	$\boxtimes$	Other: Retur	n Postcard.
5.	Dec	laration or oa	.th
	$\boxtimes$	Enclosed	
•		□ Unexec	uted
		⊠ Execute	
		<b>⊠</b>	inventors
			legal representative of inventor(s).
			37 CFR 1.42 or 1.43.
			joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
			This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See item 12 below for fee.
		Not Enclose	d
	_		
	Ļ	Application inventor(s).	s made by a person authorized under 37 C.F.R. 1.41 (c) on behalf of all the above named
			Showing that the filing is authorized.
6.	Assign	nment	
	×		
			nt of the invention to Samsung Electronics Co., Ltd.
-	٠		ed. A separate   "COVER SHEET FOR ASSIGNMENT (DOCUMENT)  "PANYING NEW PATENT APPLICATION" or FORM PTO 1595 is also attached.  low.

Additional papers enclosed

# 7. Certified Copy

Certified copy(ies) of application(s)

Korea	02-77033	December 5, 2002
Country	Appln. no.	Filed
Country	Appln. no.	Filed
Country	Appln. no.	Filed

from which priority is claimed

is (are) attached.

□ will follow.

# 8. Fee Calculation (37 C.F.R. 1.16)

<del></del>		CL	AIMS AS FILED		
	Number filed		Number Extra	Rate	Basic Fee 37 C.F.R. 1.16(a) \$770.00
Total Claims (37 CFR 1.16(c))	14	- 20 =	0	\$ 18.00	
Independent Claims (37 CFR 1.16(b))	2	- 3 =	0	\$ 86.00	
Multiple dependent claim if any (37 CFR 1.16(d))	(s),		+	\$290.00	

☐ A Preliminary Amendment is enclosed.	The filing fee is calculated based on
the status and number of claims remaining	ng after entry of the Preliminary Amendment.

☐ Amendment deleting multiple-dependencies is enclosed.

☐ Fee for extra claims is not being paid at this time.

Filing Fee Calculation

\$ 770.00

9. F	ee Payment Being Made at This Time	
	Not Enclosed	
□ (T	No filing fee is to be paid at this time. This and the surcharge required by 3 7 C. F.R. 1.16(e) can be paid	subsequently.)
×	Enclosed	
	■ Basic filing fee	<u>\$ 770.00</u>
	Recording assignment (\$40.00; 37 C.F.R. 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$ <u>40.00</u>
	Total fees enclosed	\$_810.00
10.	Method of Payment of Fees	
-	☐ Checks in the amounts of \$ 770.00, 40.00	
	☐ Charge Account No. 50-1798 in the amount of	\$
	A duplicate of this transmittal is attached.	

### 11. Authorization to Charge Additional Fees

The Commissioner is hereby authorized to charge the following additional fees during the entire pendency of this application to Account No. 50-1798.
⊠ 37 C.F.R. 1.16(a), (f) or (g) (filing fees)
☐ 37 C.F.R. 1.16(b), (c) and (d) (presentation of extra claims)
37 C.F.R. 1. 1 6(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
☐ 37 C.F.R. 1.17 (application processing fees)
□ 37 C.F.R. 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. 1.311(b))
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## 12. Instructions as to Overpayment

☐ Credit Account No. 50-1798

□ Refund

Date: 1 menly 21, 2003

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Respectfully submitted,

Steven M. Mills

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